## ABSTRACT OF THE DISCLOSURE

A scanned-stylus atomic force microscope (AFM) employing the optical lever technique, and method of operating the same. The AFM of the invention includes a light source and a scanned optical assembly which guides a light beam emitted from the light laser source onto a point on said cantilever during scanning thereof. A moving laser beam is thus created which will automatically track the movement of the cantilever during scanning. The invention also allows the laser beam to be used to measure, calibrate or correct the motion of the scanning mechanism, and further allows viewing of the sample and cantilever using an optical microscope.

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